

AttachmentEMapandDrawings

State of Alaska

AttachmentEMapandDrawings.pdf

# AVCP Tribal Region

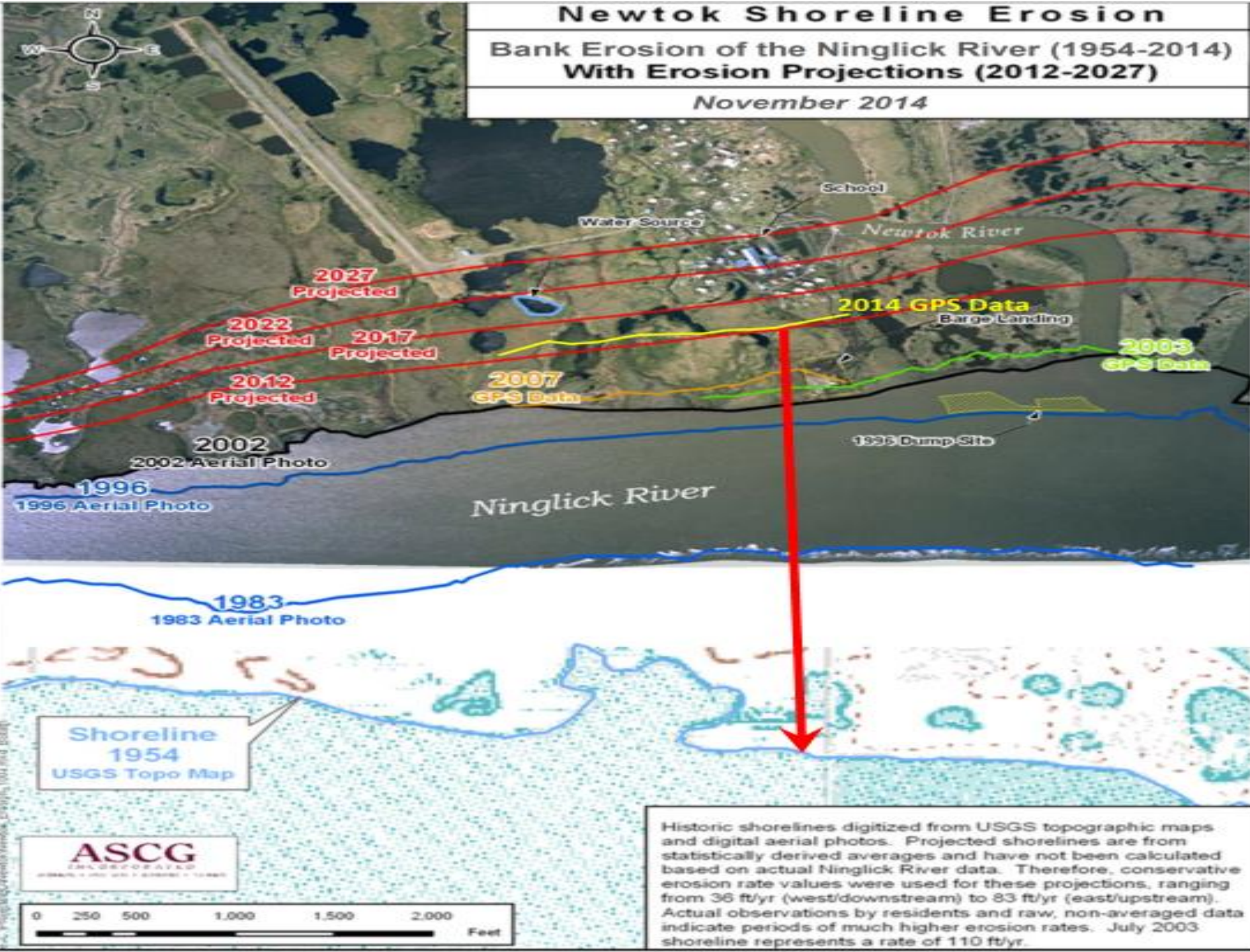
## Newtok



# Newtok Shoreline Erosion

## Bank Erosion of the Ninglick River (1954-2014) With Erosion Projections (2012-2027)

November 2014



Historic shorelines digitized from USGS topographic maps and digital aerial photos. Projected shorelines are from statistically derived averages and have not been calculated based on actual Ninglick River data. Therefore, conservative erosion rate values were used for these projections, ranging from 36 ft/yr (west/downstream) to 83 ft/yr (east/upstream). Actual observations by residents and raw, non-averaged data indicate periods of much higher erosion rates. July 2003 shoreline represents a rate of 110 ft/yr.





► **TOSSING OUT THE SLOP:** Myron Lincoln dumps human waste from the family's honey bucket onto the frozen banks of the Ninglick River at the village of Newtok last fall. A large percentage of homes in dozens of rural Alaska villages have never had flush toilets. PHOTO BY ALEX DEMARBAIN

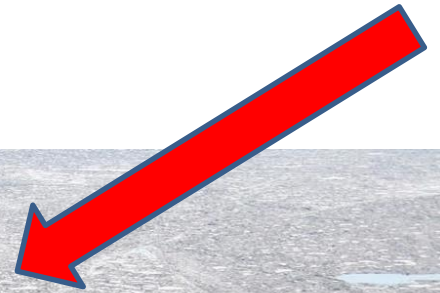


Newtok resident emptying their honey bucket in the Ninglick River. Newtok has no running water or flush toilets.



# TCC Tribal Region Galena

Yukon River





Yukon River  
Ballistic Ice





# Galena Elder Facility



## Ballistic Ice Damage





# Galena





# Galena





# Ballistic Ice from Galena Flood

Ballistic Ice can destroy homes and knock them off of their foundation



# Photo References

- Newtok Photos
  - Photo #1- Sally Cox-DCRA
  - Photo #2- Sally Cox-DCRA
  - Photo #3-Alex Demarban
- Galena Photos
  - Photo #1-David Lee- DHS&EM
  - Photo #2- National Weather Service River Watch
  - Photo #3-David Lee-DHS&EM
  - Photo #4- David Lee-DHS&EM
  - Photo #5- Mike Drummond-DHS&EM
  - Photo-#6-National Weather Service River Watch
  - Photo#7-National Weather Service River Watch
  - Photo #8-Mike Drummond